

## Claim

1. A fly ash powder containing substantially no silanol group, wherein the electric conductivity of water extract after soaking of 10 g of the fly ash powder in 100 ml of a pure water at 20°C for 6 hours is 200  $\mu$ S/cm or less.

2. The fly ash powder according to claim 1, wherein the electric conductivity of the pure water is 1  $\mu$ S/cm or less.

3. A method for producing a fly ash powder, which is a method for producing the fly ash powder of claim 1 or 2, which comprises a step of baking a fly ash powder material at a temperature of from 500 to 900°C, a step of washing the fly ash powder material after baking using an acidic aqueous solution having an acid concentration of 1.0 mol/l or less, a step of subsequently washing the same using a pure water, and a step of drying and pulverizing the same.

4. A method for producing a fly ash powder, which is a method for producing the fly ash powder of claim 1 or 2, which comprises a step of baking a fly ash powder material at a temperature of from 500 to 900°C, a step of washing the fly ash powder material after baking using an acidic

aqueous solution having an acid concentration of 15.0 mol/l or less, a step of subsequently washing the same using a pure water, a step of drying and pulverizing the same, and a step of again baking the same at a temperature of from  
5 500 to 900°C.

5. The method for producing a fly ash powder of claim 3 or 4, wherein said washing step using a pure water comprises repeated steps of water washing with a pure water  
10 having an electric conductivity of 1  $\mu$ S/cm or less at from 0 to 100°C, filtration and drying.

6. A resin composition for semiconductor encapsulation, which comprises a resin, and the fly ash  
15 powder according to claim 1 or 2 as an inorganic filler.

7. The resin composition for semiconductor encapsulation according to claim 6, wherein ratio of the fly ash powder occupying inorganic fillers in the resin  
20 composition for semiconductor encapsulation is from 10 to 100% by weight based on the total weight of inorganic fillers.

8. A semiconductor device comprising a semiconductor  
25 element having been encapsulated with the resin composition for semiconductor encapsulation according to claim 6 or 7.